### **Comparisons of Job Characteristics**

Focus Occupation: Operating Engineers and Other Construction Equipment Operators

(47-2073)

**Associated Occupation: Highway Maintenance Workers (47-4051)** 

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

| << | Focus occupation element is much lower             |
|----|--|
| <  | Focus occupation element is lower                  |
| 0  | Focus occupation element is at a similar level     |
| >  | Focus occupation element is at a higher level      |
| >> | Focus occupation element is at a much higher level |

#### Knowledge

Similarity of Focus Occupation to Associated Occupation: 76

Focus Occupation: Operating Engineers and Other Construction Equipment Operators (47-2073) Associated Occupation: Highway Maintenance Workers (47-4051)

| Associated Occupation's<br>Key Knowledge Elements | Average<br>Rating, All<br>Occupations | Associated<br>Occupation's<br>Rating | Focus<br>Occupation's<br>Rating | Evaluation of Focus Occupation |   |
|---|---------------------------------------|--------------------------------------|---------------------------------|--------------------------------|---|
| Public Safety and Security                        | 6.9                                   | 14.2                                 | 10.5                            | <<                             | Extensive education and/or training may be required |
| Building and Construction                         | 4.0                                   | 12.2                                 | 15.0                            | >                              | Current knowledge level is likely sufficient        |
| Transportation                                    | 4.6                                   | 10.6                                 | 5.8                             | <<                             | Extensive education and/or training may be required |
| Law and Government                                | 5.9                                   | 10.2                                 | 4.8                             | <<                             | Extensive education and/or training may be required |
| Telecommunications                                | 3.9                                   | 6.9                                  | 3.0                             | <<                             | Extensive education and/or training may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Skills**

Similarity of Focus Occupation to Associated Occupation: 89

Focus Occupation: Operating Engineers and Other Construction Equipment Operators (47-2073) Associated Occupation: Highway Maintenance Workers (47-4051)

| Associated Occupation's<br>Key Skills Elements | Average<br>Rating, All<br>Occupations | Associated<br>Occupation's<br>Rating | Focus<br>Occupation's<br>Rating |   | Evaluation of Focus Occupation       |  |
|--|---------------------------------------|--------------------------------------|---------------------------------|---|--------------------------------------|--|
| Operation and Control                          | 5.4                                   | 11.4                                 | 13.4                            | > | Skill level is likely sufficient     |  |
| Operation Monitoring                           | 6.6                                   | 11.4                                 | 10.0                            | < | A higher skill level may be required |  |
| Troubleshooting                                | 4.5                                   | 8.5                                  | 6.6                             | < | A higher skill level may be required |  |
| Quality Control Analysis                       | 5.9                                   | 8.4                                  | 7.5                             | < | A higher skill level may be required |  |
| Equipment Maintenance                          | 3.5                                   | 8.3                                  | 6.9                             | < | A higher skill level may be required |  |
| Repairing                                      | 3.4                                   | 7.9                                  | 6.4                             | < | A higher skill level may be required |  |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Abilities**

Similarity of Focus Occupation to Associated Occupation: 89

Focus Occupation: Operating Engineers and Other Construction Equipment Operators (47-2073) Associated Occupation: Highway Maintenance Workers (47-4051)

| Associated Occupation's<br>Key Abilities Elements | Average<br>Rating, All<br>Occupations | Associated<br>Occupation's<br>Rating | Focus<br>Occupation's<br>Rating | Evaluation of Focus Occupation |  |
|---|---------------------------------------|--------------------------------------|---------------------------------|--------------------------------|--|
| Control Precision                                 | 6.6                                   | 13.3                                 | 12.6                            | 0                              | Current ability level may be sufficient            |
| Multilimb Coordination                            | 6.0                                   | 12.9                                 | 13.2                            | 0                              | Current ability level may be sufficient            |
| Reaction Time                                     | 4.8                                   | 10.8                                 | 9.7                             | <                              | Some improvement in abilities may be required      |
| Auditory Attention                                | 5.9                                   | 10.5                                 | 7.5                             | <<                             | Extensive improvement in abilities may be required |
| Rate Control                                      | 3.8                                   | 9.8                                  | 8.6                             | <                              | Some improvement in abilities may be required      |
| Response Orientation                              | 4.0                                   | 9.8                                  | 8.7                             | <                              | Some improvement in abilities may be required      |
| Speed of Limb Movement                            | 3.2                                   | 8.7                                  | 4.8                             | <<                             | Extensive improvement in abilities may be required |
| Spatial Orientation                               | 2.7                                   | 6.9                                  | 5.3                             | <                              | Some improvement in abilities may be required      |
| Peripheral Vision                                 | 2.2                                   | 5.5                                  | 5.1                             | 0                              | Current ability level may be sufficient            |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 67

Focus Occupation: Operating Engineers and Other Construction Equipment Operators (47-2073) Associated Occupation: Highway Maintenance Workers (47-4051)

| Work Activities                                 | Exclusivity of Activity |
|---|-------------------------|
| Operate tractor with accessories or attachments | 76                      |
| Understand construction specifications          | 53                      |
| Use hand or power tools                         | 2                       |

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

# **Tools and Technologies that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 93

### Focus Occupation: Operating Engineers and Other Construction Equipment Operators (47-2073) Associated Occupation: Highway Maintenance Workers (47-4051)

| Tools and Technologies                                   | Exclusivity |
|--|-------------|
| Aerial lifts   | 13          |
| Agricultural machinery for harvesting                    | 35          |
| Agricultural machinery for planting and seeding          | 33          |
| Agricultural machinery for soil preparation              | 35          |
| Cleaning equipment                                       | 11          |
| Compressors  | 9           |
| Computers  | 1           |
| Dispersing and spraying appliances for agriculture       | 26          |
| Drilling and operation machinery                         | 29          |
| Earth moving machinery                                   | 11          |
| Forming tools  | 2           |
| Garden tools   | 12          |
| Heating equipment and parts and accessories              | 19          |
| Heavy equipment components                               | 21          |
| Length and thickness and distance measuring instruments  | 2           |
| Lifting equipment and accessories                        | 3           |
| Paint applicators and painting accessories               | 15          |
| Passenger motor vehicles                                 | 13          |
| Paving equipment   | 35          |
| Personal communication devices                           | 2           |
| Pneumatic tools  | 8           |
| Power generators   | 16          |
| Power tools  | 2           |
| Product and material trailers                            | 24          |
| Product and material transport vehicles                  | 13          |
| Pumps  | 9           |
| Soldering and brazing and welding machinery and supplies | 6           |
| Specialized and recreational vehicles                    | 17          |
| Wrenches and drivers                                     | 2           |

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of  $O^*NET$  (Occupation Information Network) data.